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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,325	12/13/2004	Bryan Nicholas Flynn	04229	3913
23338 7590 03/28/2008 DENNISON, SCHULTZ & MACDONALD 1727 KING STREET SUITE 105 ALEXANDRIA, VA 22314				
EXAMINER KHATRI, PRASHANT J				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
03/28/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/516,325

Applicant(s)

FLYNN ET AL.

Examiner

PRASHANT J. KHATRI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-8 and 10-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2-8 and 10-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter as claimed is the reverse of what is shown in Figure 1 and described on p. 4, paragraph 3 of the specification. As shown in Figure 1, the base plate seems to be stationary while the sonotrode is the movable projection.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 2-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stark (**US 6,095,720**) in view of Kocher (**US 4,305,988**).
3. Applicants claim a method of producing a waterproofing material comprising a core layer with bentonite clay between a first and second carrier layers. The carrier layers are connected by ultrasonic welding at intervals or along one or more lines by

bringing a base plate projection into contact with a first layer and bringing a sonotrode into contact with a second layer at an opposing location and at intervals. Additionally, it is claimed the welding is done at offset regions.

4. Stark discloses a stabilized fluid barrier member and method of forming the same. Concerning claims 2 and 3, prior art discloses the barrier member comprises a first outer sheet member and second outer sheet member comprising polypropylene, polyesters, and other known geotextiles (**col. 10, lines 1+; FIG. 3, elements 32 & 44**). Regarding claim 4, prior art discloses an intermediary film or membrane disposed between the above (**col. 9, lines 56+**). Examiner notes that prior art discloses the term "stabilizer element" which is deemed equivalent to Applicants' impermeable film or membrane as it serves as a barrier material (**col. 6, lines 6+**). The stabilizer element also includes montmorillonite is used as the clay composition in the stabilizer. Specifically, prior art uses a bentonite clay that is hydrated, unhydrated, or in any degree of water content (**col. 11, lines 54+; col. 12, lines 40+**). As shown in Figure 3, element 42 forms a layer which prior art discloses is a selective fluid-impervient material (**col. 9, lines 35+**). Examiner regards the material as equivalent to the elements claimed by Applicant as the material is impermeable to certain liquids, solids, and gases. In regards to claim 6, prior art discloses stabilizer element or barrier member is by extruded (**col. 13, lines 3+**) in conjunction with the above description of the clay used. Regarding claims 7 and 8, prior art discloses one embodiment that contains a geonet. Prior art defines the geonet as a "netlike polymeric material formed from intersecting ribs integrally joined at the junctions" (**col. 13 bridged to col. 14; lines**

60+). Furthermore, as shown by FIG. 4, the geonet is disposed between the two outer layers. Examiner considers the above disclosure equivalent to the perforated material that is disposed in the core layer. Regarding claims 10 and 11, prior art discloses the bonding operation can be carried out using ultrasonic welding means (**col. 8, lines 5+**). Additionally, prior art discloses the stabilizer element is "in contact with and bonded to at least a portion of the first sheet member and the optionally, the second outer sheet member" (**col. 6 bridged to col. 7, lines 64+**). Examiner considers this as the bonding scheme disclosed by prior art. However, prior art is silent to exact process of using ultrasonic bonding on the layers.

5. Kocher discloses a composite material with ultrasonic welded seams and the method of carrying out said welding process. The composite article comprises of a top and bottom layer of materials that are ultrasonically weldable and disposed in between said layers is a non-ultrasonically weldable material. Examiner regards the clay as the non-ultrasonically weldable material. Prior art discloses that at least one of the upper and lower layers are elastic materials (**col. 2, lines 46+**). Examiner regards upper and lower layers equivalent to the Applicants' claim of non-woven textile fabric. Regarding the process, prior art discloses two rows of anvil plates with projections, joining the upper and lower layers (**col. 5, lines 23+**). Above the series of anvil plates is the oscillating body, which Examiner considers to be the sonotrode as they are interchangeable terms within the art. Examiner notes that prior art discloses that the material disposed between the upper and lower layers can have some connection with the upper and lower layer at the weld seams if said material is weldable by ultrasonic

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welding (**col. 5, lines 14+**). Examiner regards this disclosure as "cutting" through a part of the central layer in conjunction with the upper and lower layers. Regarding claim 11, prior art notes that the spaces between the anvil plates can be adjusted, which Examiner interprets as precluding the offset position of the plate projection (**col. 5, lines 37+**).

6. It would have been obvious to one with ordinary skill in the art to use the process disclosed by Kocher to bond the laminate disclosed by Stark. With respect to the use of weldable material in the central layer by Kocher, Examiner notes that the geonet disclosed by Stark is a polymeric material and would be considered to be the weldable material in the ultrasonic welding process. In regards to the motivation to combine, the use of ultrasonic welding is a known process to seal plastic films and Stark discloses it as a bonding process. Furthermore, the method claimed by Applicants is considered by Examiner to be a sealing process at intermittent distances. Thus, the process disclosed by Kocher with respect to the laminate disclosed by Stark would yield the claimed invention by Applicants.

Response to Arguments

7. Applicants' arguments, see p. 5, filed 1/4/2008, with respect to the Flynn rejection of claims 1-8 and 10 have been fully considered and are persuasive. The 102 rejection of claims 1-8 and 10 have been withdrawn.

8. Applicants' arguments, see p. 5, filed 1/4/2008, with respect to the Heerten rejection of claims 1-6 and 9-11 have been fully considered and are persuasive. The 102 rejection of claims 1-6 and 9-11 has been withdrawn.
9. Applicants' arguments, see p. 5, filed 1/4/2008, with respect to the Peggs rejection of claims 1-11 have been fully considered and are persuasive. The 103 rejection of claims 1-11 has been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PRASHANT J. KHATRI whose telephone number is (571)270-3470. The examiner can normally be reached on M-F 8:00 A.M.-5:00 P.M. (First Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PRASHANT J KHATRI
Examiner
Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794